C-A OPERATIONS PROCEDURES MANUAL

ATTACHMENT

4.120.13.e WXY (PEER 5) MODE 24 TESTS

C-A-OPM Procedures in which this Attachment is used.		
4.120.13		

Hand Processed Changes

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Collider-Accelerator Department Chairman Date

V. Castillo

4.120.13.e WXY (PEER 5) Mode 24 Tests

PASS ANNUAL ACCEPTANCE TEST PROTOCOL

Division A Software Filename and Checksum: Title:_____ Checksum: _____

Division B Software Filename and Checksum: Title:_____ Checksum: _____

Initial testing complete:

Test Team Leader's Name (Print): _____ Life Number: _____

Test Team Leader's Name (Sign): _____ Date: _____/_____/_____

Acceptance test procedure complete (following repairs and retesting if required):

Test Team Leader's Name (Print): _____ Life Number:_____

Test Team Leader's Name (Sign): _____ Date: _____/_____/_____

Test results reviewed by:

Safety Section Head's Name (Print):_____ Life Number: _____

Safety Section Head's Name (Sign):_____ Date: _____/_____/_____

Test results accepted by Radiation Safety Committee:

RSC Member's Name (Print):_____ Life Number: _____

RSC Member's Name (Sign):_____ Date: _____/_____/_____

1.1 Verify necessary conditions for Mode 24

	PLACE	**Peer 5** in **Mode 16**	
□	**VERIFY**	**Peer 5** is in **Controlled Access**	**MODE 16**
	RESET	**Peer 5 gates:** WGE1, XGI1, XGI2, YGI1, YGI2 and WGE2	
□	**VERIFY**	**Peer 5 gates:** □ WGE1, □ XGI1, □ XGI2, □ YGI1, □ YGI2, and □ WGE2 are	**RESET**
	SWEEP	**Peer 5 Zones:** W, X and Y, **leaving one Personnel in Zone W**	
□	**VERIFY**	**Peer 5 Zones:** □ W, □ X and □ Y are	**SWEEP OK**
	PLACE	**Peer 5** in **Mode 24**	
□	**VERIFY**	**Peer 5** is in **No Access**	**MODE 24**
	RECORD	**Duration [_____ secs]** of **Beam Imminent Alarm**	
□	**VERIFY**	**Red No Access Light** at Gates: □ WGE1, □ WGE2 is	**ON**
	PLACE	**Peer 5** in **Mode 16**	
□	**VERIFY**	**Peer 5** is in **Controlled Access**	**MODE 16**
	REMOVE	**Reset** from gate **WGE2**	
□	**VERIFY**	**MCR** sees gate **WGE2** is	**CLOSED**
	PLACE	**Peer 5** in **Mode 24**	
□	**VERIFY**	**Attempt** to place **Peer 5** in **No Access Mode**	**FAIL**
	RESET	Gate **WGE2**	
□	**VERIFY**	**MCR** sees gate **WGE2**	**RESET**
	PLACE	**Peer 5** in **Mode 24**	
□	**VERIFY**	**MCR** sees **Peer 5** in **No Access**	**MODE 24**
	PLACE	**Peer 5** in **Mode 16**	
□	**VERIFY**	**Peer 5** is in **Controlled Access**	**MODE 16**
	REMOVE	**Sweep** from zone **X**	
□	**VERIFY**	**MCR** sees zone **X** is	**NO SWEEP**
	PLACE	**Peer 5** in **Mode 24**	
□	**VERIFY**	**Attempt** to place **Peer 5** in **No Access Mode**	**FAIL**
	SWEEP	Zone **X**	
□	**VERIFY**	**MCR** sees zone **X**	**SWEEP OK**
	PLACE	**Peer 5** in **Mode 24**	
□	**VERIFY**	**MCR** sees **Peer 5** in **No Access**	**MODE 24**
	PLACE	**Peer 5** in **Mode 16**	
□	**VERIFY**	**Peer 5** is in **Controlled Access**	**MODE 16**
	REMOVE	**Sweep** from zone **Y**	
□	**VERIFY**	**MCR** sees zone **Y** is	**NO SWEEP**
	PLACE	**Peer 5** in **Mode 24**	
□	**VERIFY**	**Attempt** to place **Peer 5** in **No Access Mode**	**FAIL**
	SWEEP	Zone **Y**	
□	**VERIFY**	**MCR** sees zone **Y**	**SWEEP OK**
	PLACE	**Peer 5** in **Mode 24**	
□	**VERIFY**	**MCR** sees **Peer 5** in **No Access**	**MODE 24**
	PLACE	**Peer 5** in **Mode 16**	
□	**VERIFY**	**Peer 5** is in **Controlled Access**	**MODE 16**

□ **Check for acceptance of Verify necessary conditions for Mode 24**

1.2 Verify System Response to Opening a Gate while in Mode 24

□	**VERIFY**	**CD Key Switch** is **set** for	**XY ARC**
□	**VERIFY**	**Peer 5** is in **Controlled Access**	**MODE 16**
	SET	**RHIC Primary Beam Stop Withdraw Cmd** button in **MCR**	**IN**
□	**VERIFY**	**MCR** sees **RHIC Primary Beam Stop Withdraw Cmd**	**IN**
□	**VERIFY**	**MCR** sees **RHIC Injection CDs** (U, W) on **CD** page	**DISABLED**
□	**VERIFY**	**MCR** sees Peer 5 **Div A** □ and **Div B** □ Rhic Inj **Rhbk** Lth	**OFF**
□	**VERIFY**	**MCR** sees Peer 5 **Div A** □ and **Div B** □ Rhic **Rhbk** Lth (BS 3)	**OFF**
□	**VERIFY**	**MCR** sees Peer 5 **Div A** □ and **Div B** □ ATR **inh** (for 8^o & 20^o)	**ON**
□	**VERIFY**	**MCR** sees Peer 5 **Div A** □ and **Div B** □ ATR **Rhbk** Lth	**OFF**
□	**VERIFY**	**MCR** sees Peer 5 **Div A** Rhic Ring **inh** (BS 1,2)	**OFF**
□	**VERIFY**	**MCR** sees Peer 5 **Div B** Rhic Ring **inh** (BS 1,2)	**ON**
	PLACE	**Peer 5** in **Mode 24**	
□	**VERIFY**	**MCR** sees **Peer 5** in **No Access**	**MODE 24**
	WAIT	For **Beam Imminent Alarm** to stop sounding	
□	**VERIFY**	**MCR** sees **RHIC Injection CDs** (U, W) on **CD** page	**ENABLED**
□	**VERIFY**	**MCR** sees Peer 5 **Div A** □ and **Div B** □ Rhic Inj **Rhbk** Lth	**OFF**
□	**VERIFY**	**MCR** sees Peer 5 **Div A** □ and **Div B** □ Rhic **Rhbk** Lth (BS 3)	**OFF**
□	**VERIFY**	**MCR** sees Peer 5 **Div A** □ and **Div B** □ ATR **inh** (for 8^o & 20^o)	**OFF**
□	**VERIFY**	**MCR** sees Peer 5 **Div A** □ and **Div B** □ ATR **Rhbk** Lth	**OFF**
□	**VERIFY**	**MCR** sees Peer 5 **Div A** Rhic Ring **inh** (BS 1,2)	**OFF**
□	**VERIFY**	**MCR** sees Peer 5 **Div B** Rhic Ring **inh** (BS 1,2)	**ON**
	SET	**RHIC Primary Beam Stop Withdraw Cmd** button in **MCR**	**OUT**
□	**VERIFY**	**MCR** sees **RHIC Primary Beam Stop Withdraw Cmd**	**OUT**
□	**VERIFY**	**MCR** sees Peer 5 **Div B** Rhic Ring **inh** (BS 1,2)	**OFF**
	FOLLOW	**Test schedule in Table 1, below**	

Open Gate	Verify peer 5 goes to Mode 2	Verify local sweep: W,X,Y is lost	Verify RHIC Inj CD Disab	Verify Div A & B for ATR inh, 8^o, 20^o ON	Verify Div A & B inh for RHIC BS 1,2 ON	Place peer 5 in Mode 24 & Alarm stop	Verify RHIC Inj CD Enab	Verify Div A & B for ATR inh, 8^o, 20^o OFF	Verify RHIC BS wdraw cmd OUT	Verify Div A & B inh for RHIC BS 1,2 OFF	Go to next gate
XGI1	□	□	□	□	□	□	□	□	□	□	□
WGE2	□	□	□	□	□	□	□	□	□	□	□
YGI2	□	□	□	□	□	□	□	□	□	□	End of test

Table 1- Test of Gates in Mode 24

□ **Check for acceptance of Verify System Response to Opening a Gate while in Mode 24**

1.3 Verify Entry gates are securely locked in Mode 24

	PLACE	**Peer 5** in **Mode 24**	
□	**VERIFY**	**MCR** sees **Peer 5** in **No Access**	**MODE 24**
	WAIT	For **Beam Imminent Alarm** to stop sounding	
	OPEN	Gate **WGE2** with **#10 RC CA Key** and **Simultaneous Release**	
□	**VERIFY**	Attempt to open gate **WGE2** with **#10 RC CA Key** and **Sim. Rel.**	**FAIL**
	OPEN	Gate **WGE2** with **#11 RC Sweep Key** and **Simultaneous Release**	
□	**VERIFY**	Attempt to open gate **WGE2** with **#11 RC Sweep Key** and **Sim. Rel.**	**FAIL**
	OPEN	Gate **WGE2** with **Blue Card**	
□	**VERIFY**	Attempt to open gate **WGE2** with **Blue Card**	**FAIL**

□ **Check for acceptance of Verify Entry gates are securely locked in Mode 24**

1.4 Verify System Response to Pulling a Crash Cord while in Mode 24

Test of Zone X

□	**VERIFY**	**CD Key Switch** is **set** for	**XY ARC**
	PLACE	**Peer 5** in **Mode 24**	
□	**VERIFY**	**MCR** sees **Peer 5** in **No Access**	**MODE 24**
	WAIT	For **Beam Imminent Alarm** to **stop** sounding	
□	**VERIFY**	**MCR** sees **RHIC Injection CDs** (U, W) on **CD** page	**ENABLED**
□	**VERIFY**	**MCR** sees Peer 5 **Div A** □ and **Div B** □ Rhic Inj **Rhbk** Lth	**OFF**
□	**VERIFY**	**MCR** sees Peer 5 **Div A** □ and **Div B** □ Rhic **Rhbk** Lth (BS 3)	**OFF**
□	**VERIFY**	**MCR** sees Peer 5 **Div A** □ and **Div B** □ ATR **inh** (for 8^o & 20^o)	**OFF**
□	**VERIFY**	**MCR** sees Peer 5 **Div A** □ and **Div B** □ ATR **Rhbk** Lth	**OFF**
□	**VERIFY**	**MCR** sees Peer 5 **Div A** Rhic Ring **inh** (BS 1,2)	**OFF**
□	**VERIFY**	**MCR** sees Peer 5 **Div B** Rhic Ring **inh** (BS 1,2)	**ON**
	SET	**RHIC Primary Beam Stop Withdraw Cmd** button in **MCR**	**OUT**
□	**VERIFY**	**MCR** sees **RHIC Primary Beam Stop Withdraw Cmd**	**OUT**
□	**VERIFY**	**MCR** sees Peer 5 **Div B** Rhic Ring **inh** (BS 1,2)	**OFF**
	PULL	Any **Zone X crash cord [System #: _____]**	
□	**VERIFY**	**Peer 5** goes to	**MODE 2**
□	**VERIFY**	**Sweep** is	**LOST**
□	**VERIFY**	**MCR** sees **RHIC Injection CDs** (U, W) on **CD** page	**DISABLED**
□	**VERIFY**	**MCR** sees Peer 5 **Div A** □ and **Div B** □ Rhic Inj **Rhbk** Lth	**OFF**
□	**VERIFY**	**MCR** sees Peer 5 **Div A** □ and **Div B** □ Rhic **Rhbk** Lth (BS 3)	**OFF**
□	**VERIFY**	**MCR** sees Peer 5 **Div A** □ and **Div B** □ ATR **inh** (for 8^o & 20^o)	**ON**
□	**VERIFY**	**MCR** sees Peer 5 **Div A** □ and **Div B** □ ATR **Rhbk** Lth	**OFF**
□	**VERIFY**	**MCR** sees Peer 5 **Div A** □ and **Div B** □ Rhic Ring **inh** (BS 1,2)	**ON**
	REARM	**Crash device**	

	RESET	**Crash at MCR**	
□	**VERIFY**	**Crash is**	**RESET**
	PLACE	**Peer 5** in **Mode 24**	
□	**VERIFY**	**Peer 5** is in **Beam Imminent Mode**	**MODE 24**
	PULL	Any **Zone X crash cord [System #: _____]** when **alarm starts sounding**	
□	**VERIFY**	**Beam Imminent alarm**	**STOPS**
□	**VERIFY**	**Peer 5** has moved to	**MODE 2**
□	**VERIFY**	**MCR** sees **Zone X**	**CRASHED**
	PLACE	**Peer 5** in **Mode 8** (Restricted Access)	
□	**VERIFY**	**Attempt** to go to **Mode 8**	**FAIL**
	REARM	**Crash device**	
	RESET	**Crash at MCR**	
□	**VERIFY**	**Crash is**	**RESET**
	PLACE	**Peer 5** in **Mode 8**	
□	**VERIFY**	**MCR** sees **Peer 5** in **Restricted Access**	**MODE 8**

Test of Zone Y

	PLACE	**Peer 5** in **Mode 24**	
□	**VERIFY**	**MCR** sees **Peer 5** in **No Access**	**MODE 24**
	PULL	Any **Zone Y crash cord [System #: _____]** when **alarm starts sounding**	
□	**VERIFY**	**Beam Imminent alarm**	**STOPS**
□	**VERIFY**	**Peer 5** has moved to	**MODE 2**
□	**VERIFY**	**MCR** sees **Zone Y**	**CRASHED**
	PLACE	**Peer 5** in **Mode 8** (Restricted Access)	
□	**VERIFY**	**Attempt** to go to **Mode 8**	**FAIL**
	REARM	**Crash device**	
	RESET	**Crash at MCR**	
□	**VERIFY**	**Crash is**	**RESET**
	PLACE	**Peer 5** in **Mode 8**	
□	**VERIFY**	**MCR** sees **Peer 5** in **Restricted Access**	**MODE 8**

□ **Check for acceptance of Verify System Response to Pulling a Crash Cord while in Mode 24**

1.5 Test Division A loss of Remote I/O in Mode 24

□	**VERIFY**	**CD Key Switch** is **set** for	**XY ARC**
□	**VERIFY**	**MCR** sees **Peer 5** in **No Access**	**MODE 24**
□	**VERIFY**	**MCR** sees **RHIC Injection CDs** (U, W) on **CD** page	**ENABLED**
□	**VERIFY**	**MCR** sees Peer 5 **Div A** □ and **Div B** □ Rhic Inj **Rhbk** Lth	**OFF**
□	**VERIFY**	**MCR** sees Peer 5 **Div A** □ and **Div B** □ Rhic **Rhbk** Lth (BS 3)	**OFF**

□	**VERIFY**	**MCR** sees Peer 5 **Div A** □ and **Div B** □ ATR **inh** (for 8^o & 20^o)	**OFF**
□	**VERIFY**	**MCR** sees Peer 5 **Div A** □ and **Div B** □ ATR **Rhbk** Lth	**OFF**
□	**VERIFY**	**MCR** sees Peer 5 **Div A** Rhic Ring **inh** (BS 1,2)	**OFF**
□	**VERIFY**	**MCR** sees Peer 5 **Div B** Rhic Ring **inh** (BS 1,2)	**ON**
	SET	**RHIC Primary Beam Stop Withdraw Cmd** button in **MCR**	**OUT**
□	**VERIFY**	**MCR** sees **RHIC Primary Beam Stop Withdraw Cmd**	**OUT**
□	**VERIFY**	**MCR** sees Peer 5 **Div B** Rhic Ring **inh** (BS 1,2)	**OFF**
	UNPLUG	Remote **I/O** cable from **Scanner module** in **Peer 5A**	
	WAIT	**30 secs**	
	REPLACE	Remote **I/O** cable at **Scanner module** in **Peer 5A**	
□	**VERIFY**	**MCR** sees **Peer 5 Div A Cdev RI/O** on H/W page	**FAULT**
□	**VERIFY**	**MCR** sees **Peer 5 Div A** on Mtce Status page	**MODE 2**
□	**VERIFY**	**MCR** sees **RHIC Injection CDs** (U, W) on **CD** page	**A ≠ B**
□	**VERIFY**	**MCR** sees Peer 5 **Div A** □ and **Div B** □ Rhic Inj **Rhbk** Lth	**OFF**
□	**VERIFY**	**MCR** sees Peer 5 **Div A** Rhic **Rhbk** Lth (BS 3)	**ON**
□	**VERIFY**	**MCR** sees Peer 5 **Div A** ATR **inh** (for 8^o & 20^o)	**ON**
□	**VERIFY**	**MCR** sees Peer 5 **Div A** ATR **Rhbk** Lth	**ON**
□	**VERIFY**	**MCR** sees Peer 5 **Div A** Rhic Ring **inh** (BS 1 & 2)	**ON**
□	**VERIFY**	**MCR** sees Peer 5 **AGS Rchbk**	**Reachback**
□	**VERIFY**	**MCR** sees Peer 5 **RHIC Rchbk**	**Reachback**
	RESET	**Cdev RIO** FAULT at **MCR**	
□	**VERIFY**	**MCR** sees **Cdev RIO**	**OK**
	RESET	**Reachbacks**	
□	**VERIFY**	**MCR** sees Peer 5 **AGS Rchbk**	**Reachback OK**
□	**VERIFY**	**MCR** sees Peer 5 **RHIC Rchbk**	**Reachback OK**
	PLACE	**Peer 5** in **Mode 2**	
□	**VERIFY**	**MCR** sees **Peer 5** in **Safe Access**	**MODE 2**

□ **Check for acceptance of Test Division A loss of Remote I/O in Mode 24**

1.6 Test Division B loss of Remote I/O in Mode 24

□	**VERIFY**	**CD Key Switch** is **set** for	**XY ARC**
	PLACE	**Peer 5** in **Mode 16**	
□	**VERIFY**	**MCR** sees **Peer 5** in **Controlled Access**	**MODE 16**
	PLACE	**Peer 5** in **Mode 24**	
□	**VERIFY**	**MCR** sees **Peer 5** in **No Access**	**MODE 24**
□	**VERIFY**	**MCR** sees **RHIC Injection CDs** (U, W) on **CD** page	**ENABLED**

□	**VERIFY**	**MCR** sees Peer 5 **Div A** □ and **Div B** □ Rhic Inj **Rhbk** Lth	**OFF**
□	**VERIFY**	**MCR** sees Peer 5 **Div A** □ and **Div B** □ Rhic **Rhbk** Lth (BS 3)	**OFF**
□	**VERIFY**	**MCR** sees Peer 5 **Div A** □ and **Div B** □ ATR **inh** (for 8^o & 20^o)	**OFF**
□	**VERIFY**	**MCR** sees Peer 5 **Div A** □ and **Div B** □ ATR **Rhbk** Lth	**OFF**
□	**VERIFY**	**MCR** sees Peer 5 **Div A** Rhic Ring **inh** (BS 1,2)	**OFF**
□	**VERIFY**	**MCR** sees Peer 5 **Div B** Rhic Ring **inh** (BS 1,2)	**ON**
	SET	**RHIC Primary Beam Stop Withdraw Cmd** button in **MCR**	**OUT**
□	**VERIFY**	**MCR** sees **RHIC Primary Beam Stop Withdraw Cmd**	**OUT**
□	**VERIFY**	**MCR** sees Peer 5 **Div B** Rhic Ring **inh** (BS 1,2)	**OFF**
	UNPLUG	Remote **I/O** cable from **Scanner module** in **Peer 5B**	
	WAIT	**30 secs**	
	REPLACE	Remote **I/O** cable at **Scanner module** in **Peer 5B**	
□	**VERIFY**	**MCR** sees **Cdev RIO** on H/W page	**FAULT**
□	**VERIFY**	**MCR** sees **Peer 5 Div B** go to	**MODE 2**
□	**VERIFY**	**MCR** sees **RHIC Injection CDs** (U, W) on **CD** page	**A ≠ B**
□	**VERIFY**	**MCR** sees Peer 5 **Div B** Rhic Inj **Rhbk** Lth	**ON**
□	**VERIFY**	**MCR** sees Peer 5 **Div A** □ and **Div B** □ Rhic **Rhbk** Lth (BS 3)	**OFF**
□	**VERIFY**	**MCR** sees Peer 5 **Div B** ATR **inh** (for 8^o & 20^o)	**ON**
□	**VERIFY**	**MCR** sees Peer 5 **Div B** ATR **Rhbk** Lth	**ON**
□	**VERIFY**	**MCR** sees Peer 5 **Div B** Rhic Ring **inh** (BS 1 & 2)	**ON**
□	**VERIFY**	**MCR** sees Peer 5 **AGS Rchbk**	**Reachback**
□	**VERIFY**	**MCR** sees Peer 5 **W Rchbk**	**Reachback**
□	**VERIFY**	**MCR** sees Peer 5 **RHIC Rchbk**	**Reachback**
□	**VERIFY**	**MCR** sees **RHIC G3 BS**	**IN**
	RESET	**Cdev RIO** FAULT at **MCR**	
□	**VERIFY**	**MCR** sees **Cdev RIO** on H/W page	**OK**
	RESET	**Reachbacks**	
□	**VERIFY**	**MCR** sees Peer 5 **AGS Rchbk**	**Reachback OK**
□	**VERIFY**	**MCR** sees Peer 5 **W Rchbk**	**Reachback OK**
□	**VERIFY**	**MCR** sees Peer 5 **RHIC Rchbk**	**Reachback OK**
□	**VERIFY**	**MCR** sees **RHIC G3 BS**	**OUT**
	PLACE	**Peer 5** in **Mode 2**	
□	**VERIFY**	**MCR** sees **Peer 5** in **Safe Access**	**MODE 2**
	PLACE	**Peer 5** in **Mode 8**	
□	**VERIFY**	**MCR** sees **Peer 5** in **Restricted Access**	**MODE 8**

□ **Check for acceptance of Test Division B loss of Remote I/O in Mode 24**

1.7 Chipmunk Tests in Mode 24

□	**VERIFY**	**CD Switch** is set for	**XY ARC**
	ATTACH	**Test Box** to **Chipmunk** prior to test	
	RESET	Chipmunk **alarms**	
□	**VERIFY**	**MCR** sees **Chipmunk** alarms	**RESET**
	PLACE	**Peer 5** in **Mode 24**	
□	**VERIFY**	**MCR** sees **Peer 5** in **No Access**	**MODE 24**
	WAIT	For **Beam Imminent Alarm** to stop sounding	
□	**VERIFY**	**MCR** sees **RHIC Injection CDs** (U, W) on **CD** page	**ENABLED**
□	**VERIFY**	**MCR** sees Peer 5 **Div A** □ and **Div B** □ Rhic Inj **Rhbk** Lth	**OFF**
□	**VERIFY**	**MCR** sees Peer 5 **Div A** □ and **Div B** □ Rhic **Rhbk** Lth (BS 3)	**OFF**
□	**VERIFY**	**MCR** sees Peer 5 **Div A** □ and **Div B** □ ATR **inh** (for 8^o & 20^o)	**OFF**
□	**VERIFY**	**MCR** sees Peer 5 **Div A** □ and **Div B** □ ATR **Rhbk** Lth	**OFF**
□	**VERIFY**	**MCR** sees Peer 5 **Div A** Rhic Ring **inh** (BS 1,2)	**OFF**
□	**VERIFY**	**MCR** sees Peer 5 **Div B** Rhic Ring **inh** (BS 1,2)	**ON**
	SET	**RHIC Primary Beam Stop Withdraw Cmd** button in **MCR**	**OUT**
□	**VERIFY**	**MCR** sees **RHIC Primary Beam Stop Withdraw Cmd**	**OUT**
□	**VERIFY**	**MCR** sees Peer 5 **Div B** Rhic Ring **inh** (BS 1,2)	**OFF**
	FOLLOW	**Tests in Tables 5, 6, 7 and 8** below	

C'munk	Press & verify div A trip	Verify Peer 5 stays in mode 24	Verify div A Rhic Inj CD Disab	Verify div A & B Rhic ring inh OFF	Verify div A ATR inh ON	Reset & verify all systems reset	Verify Prim BS Cmd is OUT	Verify div A & B Rhic Inj CD Enab	Verify div A & B RHIC ring inh OFF	Verify div A & B ATR inh OFF	Goto table 8 for div B trip
C16	□	□	□	□	□	□	□	□	□	□	
C17	□	□	□	□	□	□	□	□	□	□	
C18	□	□	□	□	□	□	□	□	□	□	

Table 5 – Division A trip test in Mode 24

C'munk	Press & verify div B trip	Verify Peer 5 stays in mode 24	Verify div B Rhic Inj CD Disab	Verify div A & B Rhic ring inh OFF	Verify div B ATR inh ON	Reset & verify all systems reset	Verify Prim BS Cmd is OUT	Verify div A & B Rhic Inj CD Enab	Verify div A & B RHIC ring inh OFF	Verify div A & B ATR inh OFF	Goto table 7 for div A Fail
C16	□	□	□	□	□	□	□	□	□	□	
C17	□	□	□	□	□	□	□	□	□	□	
C18	□	□	□	□	□	□	□	□	□	□	

Table 6 – Division B Trip test in Mode 24

Cmk	Press & verify div A fails	Verify Peer 5 div A goes to mode 2	Verify Rhic Inj CD Disab	Verify div A Rhic ring inh OFF	Verify div A ATR inh ON	Reset & verify all systms reset	Place Peer 5 in mode 24 & alarm stop	Verify Prim BS Cmd is OUT	Verify div A & B Rhic Inj CD Enab	Verify div A & B RHIC ring inh OFF	Verify div A & B ATR inh OFF	Goto table 8 for div B Fail
C16	□	□	□	□	□	□		□	□	□	□	
C17	□	□	□	□	□	□		□	□	□	□	
C18	□	□	□	□	□	□		□	□	□	□	

Table 7 – Division A Fails test in Mode 24

Cmk	Press & verify div B fails	Verify Peer 5 div B goes to mode 2	Verify Rhic Inj CD Disab	Verify div B Rhic ring inh OFF	Verify div B ATR inh ON	Reset & verify all systms reset	Place Peer 5 in mode 24 & alarm stop	Verify Prim BS Cmd is OUT	Verify div A & B Rhic Inj CD Enab	Verify div A & B RHIC ring inh OFF	Verify div A & B ATR inh OFF	See end of test instrns below
C16	□	□	□	□	□	□		□	□	□	□	
C17	□	□	□	□	□	□		□	□	□	□	
C18	□	□	□	□	□	□		□	□	□	□	

Table 8 – Division B Fails test in Mode 24

End of Test Instructions:

DETACH **Test Box** from **Chipmunk** after test
CONNECT **Cable to Chipmunk**
RESET Chipmunk **faults** at **MCR**
□ **VERIFY** **MCR** sees **Chipmunk** **OK**

ATTACH **Test Box** to next **Chipmunk** and **go** to **start of test "ATTACH…"** or
END **Chipmunk** test

PLACE **Peer 5** in **Mode 8**
□ **VERIFY** **MCR** sees **Peer 5** in **Restricted Access** **MODE 8**

□ **Check for acceptance of Chipmunk Tests in Mode 24**

END OF TEST PROCEDURE

TTL: Sign for completion of initial testing: _____

Date: _____/____/_____

TTL: Sign for completion of final testing: _____

Date: _____/_____/_____